

To: Shafer, Michelle M[Michelle.M.Shafer@usace.army.mil]; Ruminski, Andrea K SPD[Andrea.K.Ruminski@usace.army.mil]
From: Tingley, Kevin
Sent: Mon 8/10/2015 3:16:14 PM
Subject: Gold King Mine

Andrea and Michelle,

Here's what I know about what is going on in Colorado (and beyond...)

--

Gold King Mine ER Site

On August 5, 2015, EPA was conducting an investigation of the Gold King Mine, north of Silverton, CO. The intent of the investigation was to assess the on-going water releases from the mine, to treat mine water, and to assess the feasibility of future mine remediation. The plan was to excavate the loose material that had collapsed into the cave entry back to the timbering. During the excavation, the loose material gave way, opening the adit (mine tunnel) and spilling the water stored behind the collapsed material into Cement Creek, a tributary of the Animas River. Initial estimates are that the release consisted of approximately one million gallons of water (estimated from the dimensions of the mine adit) that was held behind unconsolidated debris near an abandoned mine portal. There were several workers at the site at the time of the breach, all were unharmed.

The mine discharge water presented in the Animas River as river-bound plume, easily distinguished by its bright yellow-orange color. As of Friday afternoon, 8/7, an aerial survey conducted by EPA's ASPECT (Airborne Spectral Photometric Environmental Collection Technology) documented that the mine discharge water was clearly visible as far south as Aztec, NM (ca. 7pm on 8/7). Observations on 8/7 noted that water in Cement Creek and the Animas River near Silverton is clearing. EPA expects conditions will continue to improve in the coming hours and days. The adit is still discharging lower flows into Cement Creek. Today, EPA is rebuilding settling ponds to treat these flows – should be completed on 8/8. EPA will treat the mine water diverted to the ponds with caustic soda and flocculent once the ponds are built.

EPA is coordinating with ATSDR in response to public health concerns/questions associated with the mine discharge water plume. ATSDR has been in communication with local health officials at San Juan County Basin Health Department in Colorado. Any public health questions/concerns from public health agency representatives may be directed to Chris Poulet, ATSDR/R8 at 303-312-7013 Call: 303-312-7013.

EPA Region 8 has been coordinating with Region 6 and Region 9 and the states of Colorado, New Mexico, Utah, the Southern Ute Tribe. Region 6 is working closely with the New Mexico Environment Department (NMED) to evaluate possible impacts in New Mexico. Potentially impacted water systems have been notified and precautions are in place to ensure drinking water in homes is protected. Colorado officials are requiring all watercraft off the river, and other authorities are following suit. EPA and NMED are providing assistance to community water systems and closely monitoring the situation. Water sampling teams are on the ground in CO and NM (preliminary results are attached).

Site information, maps and sampling data are all available at:
http://www.epaossc.org/site/site_profile.aspx?site_id=11082. Please request a password to view the geospatial viewer for an interactive map accessed through the webpage.

EPA Region 9 Activities

The discharge has yet to cross the Navajo Nation boundary, near Hogback, but Navajo officials have reacted quickly, assessing their water intake systems and issuing a precautionary "do not use" public service announcement regarding tap water. Region 9 reached out to Navajo EPA officials and subsequently were requested assist with ambient river sampling in the San Juan River. The Navajo EPA

surface water monitoring program (Shiprock Office) collected water and sediment samples from the San Juan River today - prior to the spill impact. NNEPA also requested drinking water sampling support immediately for Navajo operated water intakes. Region 9 deployed 2 START contractors to coordinate and assist them with sample collection and lab services and will assist in creating a sampling Task Force with NNEPA, Navajo water agencies and potentially the Bureau of Reclamation.

Region 9 also is deploying an OSC Rob Wise to Durango to coordinate Navajo sampling Task Force updates and results with the Region 8 incident command post and will ensure command messages get back to Navajo officials in this early phase of the response. OSC Randy Nattis will deploy to the Navajo Nation on Monday to coordinate additional field activities. Other Region 9 staff may assist with these roles. Region 9 will also deploy a Public Information Officer (PIO) to participate in a Joint Information Center (JIC), presently in Durango, with and other the affected Federal, State, County and Tribal agencies. This person will be the point-of-contact for Navajo official and media inquiries as well. The Region anticipates coordination with Navajo agencies on public health messaging and outreach and is prepared to provide additional assistance, e.g., consultation with drinking water supply subject matter experts and community involvement resources.

Here's a current status summary for drinking water systems in case you want it for SLT. I'll plan to come by at 9am to go over this. HQ has requested this info for a briefing with Ken K this afternoon, so I'm copying others who will be coordinating with HQ.

Utah – all systems are operational.

Navajo - Aneth, Montezuma Creek, and Halchita have shut down their water supplies. San Juan County is providing emergency supplies of drinking water, and residents also can get water hauled in from Bluff, UT for their livestock. Aneth and Montezuma Creek are in need of added water haulers, though, to provide a continuous supply. Region 9 ERT will be working to assist them today. Halchita is getting water from another source and Navajo EPA said they are fine for now.

New Mexico – Aztec and Farmington still have their intakes shut down, along with several other communities that Region 6 is verifying.

Aztec - Region 6 DW staff onsite confirmed that Aztec has over 20 days of storage in 3 water reservoirs. They also have a connection to the Bloomfield system that can be used for livestock watering. Bloomfield's intake is on the San Juan river before the confluence with the Animas.

Farmington, NM has 45 days onsite raw water supply and are currently managing.

Colorado – Durango and Glacier Club still have their intakes shut down but are getting by with other sources or storage.

Durango – has a second intake on the Florida River, which was not impacted by the spill. With conservation the community has been able to achieve over the weekend, including not doing any outdoor watering, the City has been able to keep up with demand.

Glacier Club - Upon original notification call, they closed their SWTP intakes and the headgate for irrigation water to the golf course. There was no impact to the SWTP. They still have the intake and headgate closed. They have substantial finished water storage that they are using to keep the distribution system pressurized.

Animas Water Company (Hermosa, CO) - They are a groundwater system that also has an open pending

GWUDI evaluation underway to determine if the wells are under the influence of surface water in the Animas River. They have not seen an impact to the quality of their well water, and understand that there may be a delay in impact depending on the nature of the aquifer and time of travel to the wells. They are closely monitoring their water quality and will report any changes.

Private Wells – both Regions 8 and 6 have offered to test private wells to determine if they are impacted.

Kevin Tingley, P.E.
US Environmental Protection Agency

Kevin Tingley, P.E.
US Environmental Protection Agency
Water Security Division
1200 Pennsylvania Ave NW (4608T)
Washington, DC 20460

202-564-4619 (o)
202-689-9402 (c)

-----Original Message-----

From: Shafer, Michelle M [mailto:Michelle.M.Shafer@usace.army.mil]
Sent: Monday, August 10, 2015 11:06 AM
To: Tingley, Kevin; Ruminski, Andrea K SPD
Subject: RE: EOC Spot Report: Region 9, Typhoon Soudelor Response, Commonwealth of the Northern Mariana Islands (CNMI) - Update #2 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Kevin,

Was aware of the likely MA directly to EPA for W/WW support. I talked to Mark Wingate and there was good reason to go directly to EPA in this situation. We can discuss more during our call this week.

Am not familiar with the situation in Colorado - tell me more:)

Michelle "Shelly" Shafer
Disaster Program Manager
US Army Corps of Engineers
Contingency Operations Directorate
441 G Street, NW
Washington, DC 20315
202-510-0886

-----Original Message-----

From: Tingley, Kevin [mailto:Tingley.Kevin@epa.gov]
Sent: Monday, August 10, 2015 9:28 AM
To: Ruminski, Andrea K SPD; Shafer, Michelle M
Subject: [EXTERNAL] FW: EOC Spot Report: Region 9, Typhoon Soudelor Response, Commonwealth of the Northern Mariana Islands (CNMI) - Update #2

Shelly and Andrea,

FYSA - a report from EPA Region 9.

Have you heard anything about federal water support for the mine discharge in Colorado?

Nothing like multiple incidents to get the week started!

Thanks,

-Kevin